

Please amend the above-identified application as follows.

AMENDMENTS TO THE CLAIMS

Please amended claim 1 as set forth in the following listing of claims, which replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A transformed yeast cell containing a first heterologous DNA sequence which codes for a heterologous G protein coupled receptor and a second heterologous DNA sequence which codes for a heterologous G protein α subunit (G_{α}), wherein said first and second heterologous DNA sequences are capable of expression in said cell ~~and~~ such that said heterologous G protein coupled receptor and heterologous G protein α subunit (G_{α}) can operatively associate, and wherein said cell is incapable of expressing an endogenous G protein α -subunit (yeast G_{α}).
2. (Original) A transformed yeast cell according to claim 1, wherein said first heterologous DNA sequence is carried by a plasmid.
3. (Original) A transformed yeast cell according to claim 1, wherein said second heterologous DNA sequence is carried by a plasmid.
4. (Original) A transformed yeast cell according to claim 1, wherein said heterologous G protein α subunit is selected from the group consisting of G_S α subunits, G_L α subunits, G_O α subunits, G_Z α subunits, and transducin α subunits.
5. (Original) A transformed yeast cell according to claim 1 which expresses a complex of the G protein β subunit and the G protein τ subunit ($G_{\beta\tau}$).
6. (Original) A transformed yeast cell according to claim 5 which expresses endogenous $G_{\beta\tau}$.

7. (Original) A transformed yeast cell according to claim 1, wherein said first heterologous DNA sequence codes for a heterologous G protein-coupled receptor selected from the group consisting of dopamine receptors, muscarinic cholinergic receptors, α -adrenergic receptors, β -adrenergic receptors, opiate receptors, cannabinoid receptors, and serotonin receptors.
8. (Original) A transformed yeast cell according to claim 1 further comprising a third heterologous DNA sequence, wherein said third heterologous DNA sequence comprises a pheromone-responsive promoter and an indicator gene positioned downstream from said pheromone-responsive promoter and operatively associated therewith.
9. (Original) A transformed yeast cell according to claim 8, wherein said pheromone responsive promoter is selected from the group consisting of the BAR1 gene promoter and the FUS1 gene promoter, and wherein said indicator gene is selected from the group consisting of the HIS3 gene and the LacZ gene.
- 10.- 28. (Cancelled)
29. (Previously Presented) A transformed yeast cell according to claim 1, wherein said heterologous G protein coupled receptor and said heterologous G protein α subunit operatively associate and activate an endogenous yeast signal transduction pathway.
30. (Previously Presented) A transformed yeast cell according to claim 29, wherein said endogenous yeast signal transduction pathway is a yeast pheromone response pathway.